Carbon and its Compounds - Class X - Paper Set 1

1. Which element has the ability to form the maximum number of compounds?

	a) Oxygen	b) Carbon	
	c) Hydrogen	d) Nitrogen	
2.	What type of bond is primarily formed in carbon compounds?		
	a) Ionic bond	b) Metallic bond	
	c) Covalent bond	d) Hydrogen bond	
3.	The process of burning carbon compounds in the presence of oxygen is called:		
	a) Sublimation	b) Oxidation	
	c) Combustion	d) Electrolysis	
4.	. Which allotrope of carbon is known to be the hardest substance?		
	a) Graphite	b) Diamond	
	c) Fullerene	d) Carbon dioxide	
5.	The simplest hydrocarbon is:		
	a) Ethane	b) Methane	
	c) Propane	d) Butane	
6.	The chemical formula of ethanoic acid is:		
	a) CH4	b) C2H5OH	
	c) CH ₃ COOH	d) C ₂ H ₂	
7.	Which compound is used in making soaps and detergents?		
	a) Ethanol	b) Sodium acetate	
	c) Ethanoic acid	d) Sodium hydroxide	

8. What is the process called where unsaturated hydrocarbons react with hydrogen in the presence of a catalyst?

a) Substitution	b) Addition
c) Hydrogenation	d) Fermentation

9. Which of the following functional groups represents an alcohol?

a) –OH	b) –COOH
c) –CHO	d) –NH2

10. The molecular formula of benzene is:

a) C6H6	b) C5H10
c) C ₂ H ₄	d) C4H8

Answers:

- 1. b) Carbon
- 2. c) Covalent bond
- 3. c) Combustion
- 4. b) Diamond
- 5. b) Methane
- 6. c) CH₃COOH
- 7. d) Sodium hydroxide
- 8. c) Hydrogenation
- 9. a) –OH
- 10. a) C₆H₆